

THE CLAIMS

What is claimed is:

- 5 1. A distractor comprising:
first and second handles;
first and second jaws respectively associated with said first and second handles;
a first set of blades extending from said first jaw;
a second set of blades extending from said second jaw; and
10 a distractor mechanism coupled between said handles and said jaws such that movement of said handles actuates said distractor mechanism to move said jaws apart,

wherein:

- 15 said first and second sets of blades each comprise at least first and second blades spaced apart to contact anatomical elements to be distracted and permit insertion of an implant between said first and second set of blades and said anatomical elements.

- 20 2. The distractor of claim 1, wherein the distractor mechanism includes an open position in which said first set of blades is spaced relative to said second set of blades, and a closed position in which at least a portion of said first set of blades contacts at least a portion of said second set of blades; and

the first set of blades includes at least a portion that is spaced from at least a portion of the second set of blades when the distractor is in the closed position to permit placement of an implant therebetween for insertion between said anatomical elements.

25

3. The distractor of claim 1, wherein the distractor mechanism includes an open position in which said first set of blades is spaced relative to said second set of blades, and a closed position in which at least a portion of said first set of blades contacts at least a portion of said second set of blades; and

30 the first jaw includes at least a portion that is spaced relative to at least a portion of the second jaw when the distractor is in the closed position to permit the placement of an implant prior to insertion between the first and second set of blades.

35

4. The distractor of claim 1, wherein the first set of blades lie in the same plane and the second set of blades lie in the same plane; and the at least first and second blades of each set are laterally spaced relative to one another.

5. The distractor of claim 1, wherein the first set of blades has an insertion length and the second set of blades has an insertion length, and the insertion length of the first set of blades is different from the insertion length of the second set of blades.

6. The distractor of claim 1, wherein the first and second set of blades are integrally attached to their respective first and second jaws.

7. The distractor of claim 1, wherein at least one of the first and second sets of blades is removably attached to its respective first and second jaws.

8. The distractor of claim 1, wherein the distractor mechanism further comprises:
a pair of first and second proximal lever arms each having proximal and distal ends; and
a pair of first and second distal lever arms each having proximal and distal ends,
wherein:
said first handle is located at said proximal end of said first proximal lever arm;
said second handle is located at said proximal end of said second proximal lever arm;
said first jaw is located at said distal end of said first distal lever arm;
said second jaw is located at said distal end of said second distal lever arm;
one of said pair of proximal lever arms and said pair of distal lever arms is crosswise pivotally coupled; and
the other of said pair of proximal lever arms and said pair of distal lever arms is laterally pivotally coupled.

9. The distractor of claim 1, wherein the first and second jaws each include a mating fixture and the first and second set of blades each include a mating portion, wherein each mating portion is shaped for removable association with each mating fixture.

5

10. The distractor of claim 9, wherein each mating portion is a post and each mating fixture is a socket.

11. The distractor of claim 9, wherein each mating portion is a socket and each mating portion is a post.

10

12. The distractor of claim 9, wherein the mating fixture is positioned on an upper surface of the first and second jaws and at least a portion of the first and second blades extends substantially perpendicular to the upper surface of the first and second jaws.

15

13. The distractor of claim 1, wherein the first and second jaws are removably associated with the first and second handles.

20

14. The distractor of claim 1, wherein the first and second set of blades are removably associated with the first and second jaws.

15. The distractor of claim 9, further comprising a locking mechanism for locking the position of the mating portion relative to the mating fixture.

25

16. The distractor of claim 15, wherein the locking mechanism includes a ball portion.

17. The distractor of claim 1, wherein at least a portion of the first set of blades extends at a first angle relative to the first jaw and at least a portion of the second set of blades extends at a second angle relative to the second jaw.

30

18. The distractor of claim 17, wherein the first angle is substantially the same as the second angle.

35

19. The distractor of claim 17, wherein the first and second angles range from about 20° to 30° relative to a longitudinal axis of the distractor mechanism.

20. The distractor of claim 1, wherein the first and second set of blades
5 include at least one curved portion.

21. The distractor of claim 1, wherein the first and second jaws include at least one curved portion.

10 22. A method of distracting adjacent vertebrae comprising the steps of:
providing a distractor comprising first and second handles, first and
second jaws respectively coupled to said first and second handles, a first set of spaced
apart blades extending from said first jaw, a second set of spaced apart blades extending
from said second jaw, and a distractor mechanism coupled between said handles and said
15 jaws;

positioning said first set of spaced apart blades against spaced apart ends
of a first vertebral endplate;

positioning said second set of spaced apart blades against spaced apart
ends of a second vertebral endplate adjacent and facing said first vertebral endplate;

20 actuating said distractor mechanism to distract said first and second
vertebral endplates; and

inserting an implant between said first and second sets of blades and said
first and second vertebral endplates.